VEAP
Virginia Enterprise Applications Program

Establishing a Business Intelligence
Competency Center

BI Summit Meeting
June 25, 2008

Patrick Henry Building, Richmond
8:30 AM to 12:30 PM

Summit Agenda

- Welcome and Introduction
- Summit Goals
- Overview of VEAP
- Overview of Business Intelligence Initiative (BII)
- Desired Changes for Business Intelligence (BI)
    - Present state of BI activity
    - Desired future state for BI activity
- Overview of Business Intelligence Competency Center
    - Identify and discuss benefits
    - Identify and discuss general requirements
- Solicit Commitment
- Confirm senior executive sponsor
- Next Steps
- Parking Lot -- questions

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Parking lot has questions that arise during the meeting, but need to be handled later.

Welcome and Introduction

- Peggy Feldmann, Program Director
- Leonard Nottingham, BI Initiative Manager
- Paul Flanagan, BICC Consultant
- Almeater Alston, BI Initiative Analyst
- Dan Boersma, Technical Analyst
- Pam Watson, Change Leadership
- Stephan Dix, Change Leadership

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Summit Goals

- Progress update for VEAP and BI Initiative
- Establish a common vision for creating a BICC
  - Primary goal of BICC (outcomes, benefits)
  - Establish BICC general requirements
- Discuss the best go-forward strategy for establishing the BICC
- Solicit participants for BICC planning task groups
- Confirm Executive Sponsor

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Solicit participants' goals for the Summit.

Virginia Enterprise Applications Program

- **Vision**
  - Provide the Commonwealth with enterprise-wide best practice business processes consistent with Virginia's position as a best managed state and a financial and technology leader.
- **Business Goals**
  - Visibility
  - Efficiency
  - Accountability
  - Progress

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Visibility

    Enterprise access to data
    Business intelligence
    Identification and standardization of core enterprise business processes and data

Efficiency

    Streamlined functionality
    Improved business processes
    Improved user experience

Accountability

    Increased visibility of business processes and results
    Best use of resources
    Strengthened internal control structure
    Strengthened governance over enterprise-level systems applications

Progress

    Integration of disparate stand-alone systems
    Improved technology platform

Purpose of VEAP

    To modernize enterprise applications to support agency business functions

    Champion enterprise systems by collaborating with key agency stakeholders in formulating a strategic vision

    Provide project governance over enterprise-level systems and applications

Focus Areas of VEAP

Existing

    Peggy Feldmann has been assigned the Chief Applications Officer (CAO) position

        Working with the CIO / APA to define responsibilities and scope

    Enterprise Application Project Delivery (Business OneStop, TurboVet)

    Enterprise Application Centers of Excellence

Evolving

    Data Standards Management
    Application Planning & Management
    Shared Services (Business Intelligence, Enterprise Content Management)

As the CIO / VITA is to IT infrastructure and development, the CAO is to **business** IT strategy and development

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Progress so far today.

What is Business Intelligence?

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- Business Intelligence is a term for the information about an enterprise that is used by decision makers to direct the functional processes
  – Decision makers may be internal or external
  – Or, management at many levels, etc.
- Business Intelligence has a broad set of capabilities:

Reporting	Ad Hoc Query	Alerts
Notifications	Dashboards	Scorecards
Forecasting	Charts & Graphs	Cubes ("slice/dice")
Statistical analysis	Drill down	Data Management

- BI involves leveraging and unlocking information in data already available

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At the start, we define "business intelligence."

Business Intelligence processes and tools convert data to information and then to actionable knowledge.

Determine participants' familiarity with the BI concept.

Likely to get different answers – just a reflection of the fact that Business Intelligence encompasses a number of areas

BI Initiative Vision

- ***Information Delivered.***

- ***People Empowered.***

- ***Decisions Enhanced.***

- ***The Preferred Choice.***

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Information Delivered.

The Commonwealth has repositories rich with data. The challenge it often faces with these repositories is how to "unlock" them to provide authoritative, actionable information in a timely manner to the right people. The BI Initiative Vision recognizes this challenge and will assist agencies as they drive to transform data into information and then deliver that information.

People Empowered.

Technology is an enabler. People, with the right information are the true agents of positive change. The BI Initiative Vision understands that a barrier to empowering people is removed when meaningful information is delivered.

Decisions Enhanced.

The natural outcome of delivering information that empowers people is the enhancing of the decisions that those people will make. The BI Initiative Vision foresees that, equipped with meaningful information:

Commonwealth leadership can make the decisions that can sustain its place as the best managed state in the Union.

Commonwealth personnel can further enhance the delivery of the services they provide.

Commonwealth constituents can have greater visibility into the workings of state government and draw appropriate conclusions regarding the stewardship and use of Commonwealth resources.

The Preferred Choice.

By standardizing on a BI toolset and partnering with agencies to prudently deploy it throughout the Commonwealth, the benefits listed above can be realized. The BI Initiative Vision will focus on creating and encouraging a model that makes this toolset the one that agencies will reach for to address their business intelligence needs.

BI Initiative

- ***Collaborative effort*** among Executive Branch agencies and VEAP.

- ***Procurement*** of a BI toolset that meets Commonwealth requirements

- Envisions ***standardizing a BI toolset*** for information delivery and analysis.

- Establishes a ***structure*** that makes the implementations more efficient and effective:
  Business Intelligence Competency Center (BICC)

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Transition from individual agency BI, with knowledge silos and multiple projects, to a modern standard toolset supported by an adaptive BICC shared/central service based organization

BI Initiative Objectives

- Coordinate efforts to select a BI toolset with capabilities to meet Commonwealth and agency BI needs
- Develop and publish a policy that establishes BI toolset as a standard
- Establish a VITA hosted environment suitable for agency BI deployments
- Establish a BI Center of Excellence (the Business Intelligence Competency Center (BICC)) that
  - assists agencies with specific BI efforts and
  - provides a governance model for the use of the BI toolset
- Create an awareness of and an understanding about the BI Initiative
- Deliver BI implementations for two agencies within 8 months of BI toolset procurement award

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BI Initiative Goals:

Agencies throughout the Commonwealth *adopt and use* the standard BI toolset.

BICC eases the process:

Transitions to the new toolset;

Ongoing operations of the new toolset.

BICC assists Agency BI efforts: e.g., coordinating training, providing developer/analyst resources and sharing information gleaned from BI toolset use

BI Initiative's Value

– Avoids repetitious evaluations of BI vendors, tools and services
– Secures more favorable pricing for BI tools and services than could be achieved on an individual agency basis
– Offsets the cost to agencies for acquiring and implementing BI tools
– Helps agencies assess the need for and suitability of BI tools and services
– Provides access to and assistance from knowledgeable BI resources throughout BI tool implementations

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Value to both the Commonwealth and agencies.

Why do this now?

• Strategic Commonwealth objective is to modernize our central administrative systems

• How does implementing BI now help?

   • Taps the value in the data that we already have

   • Enables leadership to make better decisions…today

   • Helps determine what data is missing / required of new / updated systems

   • Provides an impetus for data transmission standards

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Progress so far today.

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BI Present State

- What BI issues do you think are most critical right now?

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(Break into small groups)

Only general issues at this point in the Summit

Collect Note Cards from Stakeholders with Current Issues --

We need to read the cards quickly and be prepared to summarize information

Discuss some of the current concerns.

Some Typical Symptoms

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- Extensive effort to report simple data
- Data integrity is suspect
- Hard to find the data – multiple systems
- Process and data changes not communicated well, if at all
- Collaboration difficult among report writers and analysts
- Insufficient training for report writers
- Little data planning
- Reporting functions are unstructured

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Other typical Symptoms of Problems:

•"Silos", agencies, lead to disparate data definitions, formats, uses, etc.

•Data integrity is suspect

•Insufficient standards and processes for data governance (no central management)

•Unclear or inconsistent definitions for data elements

•Poor documentation of meta data (Meta data is the information that describes the format and other information about the actual data. It describes what the data means, its format, time relevancy, etc.)

•"Dueling" management reports where different silos report the same information inconsistently.

Many enterprises already recognize the issue of the quality of both data and reports. As an enterprise grows rapidly, the data, reporting and functional processes grow also. But that growth may not be managed as well as it could have been. Now, with the implementation of new BI tools, the data and reporting processes can be improved. This should be executed before conversion to new transaction systems, such as ERP or CRM.

BI Future State

- What does success look like?

  – What are the prime characteristics of what we want in BI?

  – What do we want the future state of BI to look like?

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Small groups as we did for the present state discussion

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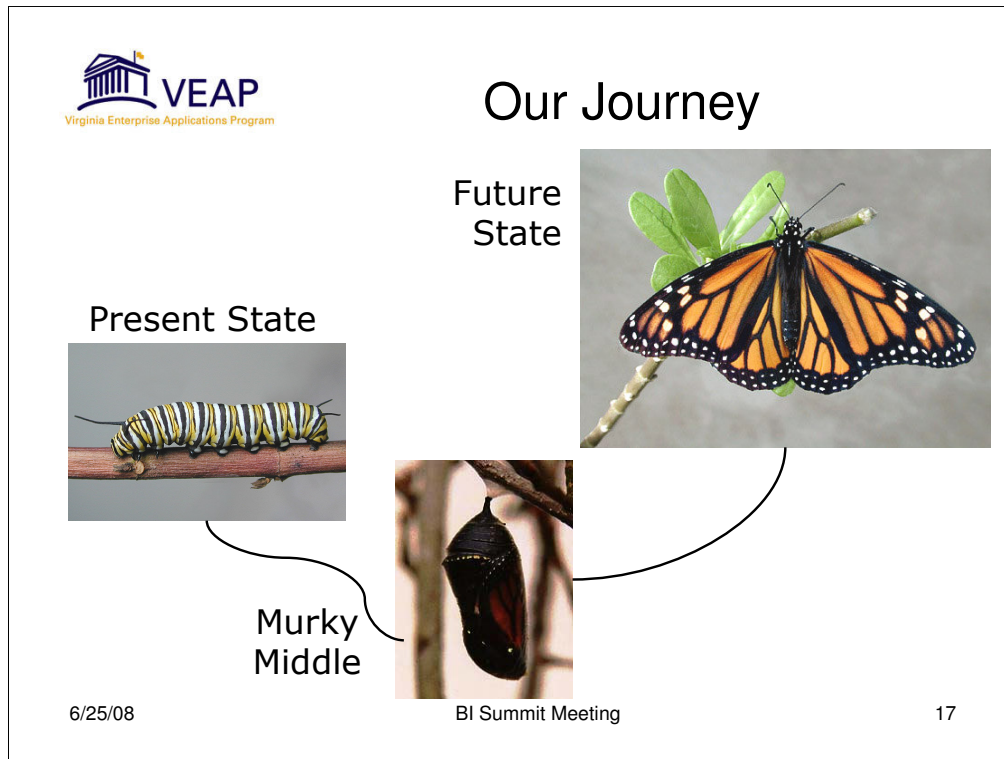• Confirm senior executive sponsor
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Progress so far today.

Break

Many enterprises are wisely upgrading their business intelligence (BI). Improving decision making though timely delivery of actionable knowledge is a key to continuing success.

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Pitfalls on the Way

- ## Effective Implementation

    - ### "It doesn't work"

- ## Effective Use

    - ### "There's no payoff"

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These are pitfalls as a result of implementation. The project team has some control over these.

Another type of pitfall is administrative, where management loses commitment to the project, usually symptomized by insufficient funding.

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Avoiding the Pitfalls

- Effective Implementation
  - Buy a good product (We are doing this.)
  - Good project execution
    - Use standard practices (e.g. ITIL, PMBOK)
    - Good project planning
    - Manage scope, cost, time, …

- Effective Use
  - Address the people issues
    - Early and often
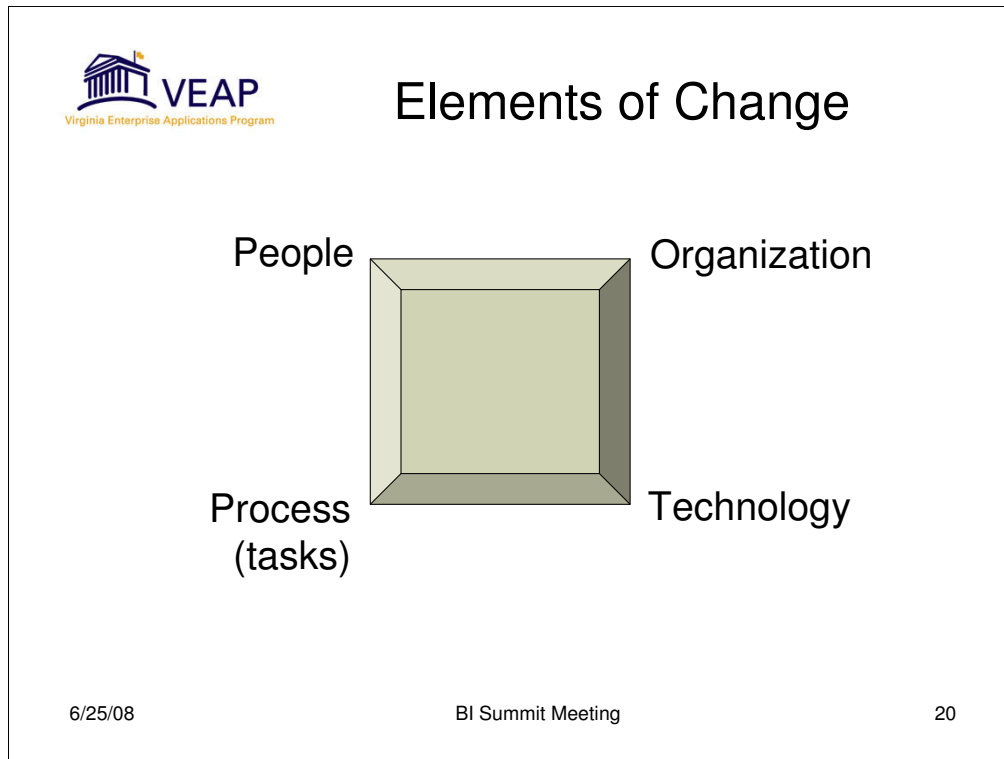   - First thought – not a later bolt on

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There is ample academic and experiential literature showing that most large technology change projects fail in some major way. This research also shows the critical factor is people oriented – not technology oriented.

CIO's know that if the users don't like a new system, they can kiss the promised value good–bye. That's why change management is so critical to the success of any new system. A well-thought-out strategy–one that's driven by the needs of the business, encourages user input during the development phase, ensures proper training and keeps the lines of communication open at all times–will go a long way toward making those multimillion dollar technology investments contribute to the bottom line.

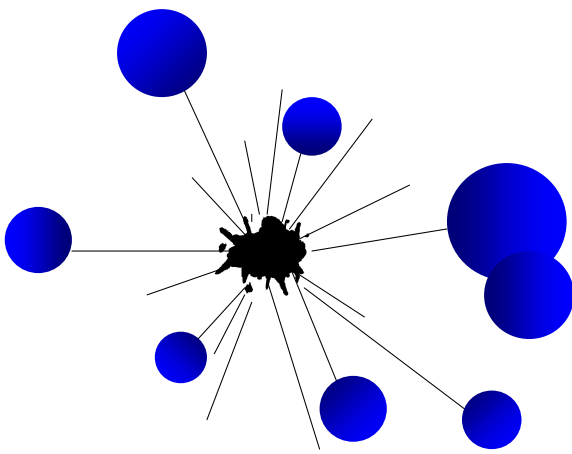Todd Datz, *CIO Magazine*, CIO Enterprise Value Awards, *No Small Change*, 2/15/2004.

Elements of Change

People   Organization

Process (tasks)   Technology

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Harold Leavitt – Organizational structure, people, tasks and technology: a change begun in any one area will ultimately create changes in the other three areas.

Leavitt, Harold J., *Applying organizational change in industry: Structural, technological and humanistic approaches.* Handbook of Organizations, 1965

This is not new news!

Eighty percent of the time, it's not about the tool, it's about the work process.

John Planalp, Proctor and Gamble, Associate Director for Corporate R&D, quoted in Todd Datz, *CIO Magazine*, CIO Enterprise Value Awards, *No Small Change*, 2/15/2004

However, the critical success factors on this project are not technological – but human. Leading the people is the single most important factor in achieving success in implementing projects for technology change

Also, no change is an island. One cannot change a system without causing massive ripples of change in business processes throughout the organization. Without managing this change, the project will not achieve the efficiency goals that management needs.

To successfully manage the project, one must lead the people.

The Data Paradox

Too Little

Too Much

Data

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"*The situation is paradoxical: at the same time people complain about too little and too much information. We cannot solve the first problem by simply producing 'more' information because this would increase the second problem. Nor can we simply cut down on the amount of information produced because this would increase the first problem. So where do we find the solution? The answer is structure. Information is only valuable to the extent that it is structured. Because of a lack of structure in the creation, distribution, and reception of information, the information often does not arrive where it is needed and, therefore, is useless.*"

Koniger, P. & Janowitz, K. (1995). Drowning in information, but thirsty for knowledge.
International Journal of Information Management, 15(1), 5-16.

Even with solid bricks, a foundation will fail unless the builder organizes its structure. A haphazard pile of bricks isn't a foundation; it is a collapse waiting to happen.

The key for a successful BI implementation project is to structure the functional BI processes so that the system (e.g. upgraded BI tools) can succeed. Effective use of the system assumes, it depends on, the quality of those processes.

The answer is a formal structure for delivering Business Intelligence.

Structure to Implement BI

- The key structure leading to success is not oriented to the technology
  - It's oriented to the people and the business processes
- Business Intelligence Competency Center
  - A best practice from industry analysts
  - Adopted in industry
  - Assisted by vendors
  - Included in standard BI training

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The next step is a more robust structure for delivering business intelligence – a Business Intelligence Competency Center (BICC)

What is a BICC?

- Business Intelligence Competency Center
    - Cross functional team with specific tasks, roles, responsibilities, and processes for supporting and promoting the effective use of Business Intelligence across the organization.

        Gartner Research

    - A Center of Excellence

    - A Community of Practice

    - Processes and people – not software

    - Not necessarily a business department

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Note that the definition focuses on the people, not the technology. The BICC is an organized team that will effect good BI. BI is really about process not software products. And the key to all successful processes is the people.

Potential BICC Benefits

- Higher performing knowledge workers
    - reporters and analysts
- Better dissemination and incorporation of best practices
- Improved access to information
    - Fewer intermediaries = faster analysis
    - Faster cross functional communication
    - Leads to faster decision making

What type of benefits would you like to receive?

BICC participants have an easier time learning and using the new tools.

Some other potential benefits (when data management is added):

•Standardized reliable data

  •More easily translated into actionable knowledge

  •Consistent understanding of information

•Shared data

  •Less redundancy reduces errors

Ask Participants what type of benefits they would like to have from the BICC.

BICC Functions (General)

- Reporting
  - converting data to information
- Analytics
  - converting information to actionable knowledge, then wisdom
- Data Acquisition
  - modeling, access, preparation, cleansing
- Data stewardship
  - getting the data right, "clean," consistent, etc.

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Consider a phased approach, consider a few functions and mature into the others.

We know data management is critical. But we have chosen to begin with reporting and analytics.

Reporting

- Multi modal delivery
  - Paper, Interactive screen – Intranet, Spreadsheet

- Multi format delivery
  - Tables, Text, Graphics, Cubes, Scorecards, Dashboards

- Multi functional
  - Static, Dynamic (drill down)

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Basic functionality to extract data and display as information

Analytics

- Statistical analyses, modeling, forecasting, optimization etc.

- Data mining

- Research and experimentation

- Data preparation for analytical purposes

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More advanced functionality to convert information to actionable knowledge.

Examples:

VDOT – accident or congestion analysis to affect road planning and design

DGS – evaluate factors leading to increased SWAM opportunities and awards

Break

Desired BICC Outcomes (1)

- Ensure BI is aligned with Agency goals
- Improved BI results for Agencies
  - Quicker, more accurate, easier access
- Reduced time for BI roll-outs
  - Development of reusable, sharable templates and components
- Enhanced employee skills
- Create an effective, high–performing partnership between the BI team and the organizational users

  What outcomes would you like to see?

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Enhancing employee skills is a general desire for Commonwealth staff management.

These are potential outcomes. Ask Participants for input

Desired BICC Outcomes (2)

- Reduce conflicts over data, trends, etc.
- Assist strategic planning
- Ability to plan / focus with longer term perspective.
- Assist in design of efficient structures for data warehouse and data storage

Any of these of interest to you?

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Which of these are most important to the participants?

VEAP Critical Success Factors
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- Executive level support

- Intensive communication with all stakeholders

- Total involvement by the knowledge workers in creation of the BI processes

- Meaningful "quick wins"

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Total involvement means full participation in setting the vision, choosing the desired path, developing the plans, deciding among alternatives. It is an approach involving all the affected staff.

The BICC needs to be grown by the BICC participants, not imposed from the outside.

Key Dimensions in Establishing a BICC

- People
- Knowledge processes
  - Initial: Reporting / Analytics
  - Later: Data management
- Infrastructure
  - Technical
  - Funding
- Culture

"How" we do this will be determined collaboratively

Other ideas?

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Ask Participants for Ideas.

These will be determined during the strategy and detailed planning sessions for the BICC.

Because this is a new way of working (i.e. from an enterprise perspective rather than an agency perspective) there needs to be consideration of how the Commonwealth BICC fits into the current agency oriented culture.

Key Attitudes

- No one succeeds unless everyone succeeds

- Open questioning of how things are

- Respect for voices from different perspectives

- Incremental change

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No one succeeds unless everyone succeeds – It's not the All Star Game; it's the World Championship

BI Success Is a Journey

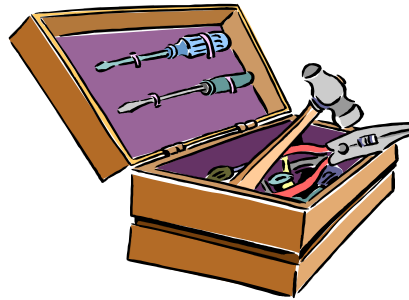6/25/08   BI Summit Meeting   35

We will proceed with a phased development. Not all activities are in place in the first phase. As the BICC matures, it will add other functions or coordinate with other groups performing those functions (e.g. data standards.)

But we should start this journey now.

Successful Upgrades

Not just tools …

People too!

Upgraded Tools Require Upgraded People!

Break

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Progress so far today.

General Requirements

- What are the most important issues you have regarding how business intelligence will be delivered with the new tools?

- If you could change one thing about how business intelligence is done today, what would that be?

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Facilitated general discussion. **What can the BICC do for you?**

Some general samples of typical issues.

How will the BICC relate to the use of the standard BI toolset?
      Initially, during BI toolset implementation.
      Later, when the tools are in production operation.

Will the BICC include the critical areas of data standards and data management?
      If not, how will the BICC coordinate with whatever organization effects data management?

Is a centralized reporting capability desired? Or distributed throughout Agencies?

Is centralized data storage capability desired? Or within–agency storage? Or a mixture?

Are people willing to change business processes as a result of the information that BI capabilities can provide?

How willing are we to provide people for this function?

How do we want to pay for these services?

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Progress so far today.

We Need Your Help

- BICC community needs members
- VEAP is providing 4 people
  - Manager
  - Developer
  - Analyst / trainer
  - BI administrator
- Success requires functional user participation
- How can you help?

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The BICC works *only* if the functional (Agency) knowledge worker users participate. It cannot be an IT oriented separate group dictating policy to the functional users.

Without significant functional user participation, the BICC and the BI Initiative *cannot* meet their objectives.

People are needed in 2 phases:

1. For BICC Planning (next few months)
2. For BICC operation (Beginning in the Fall)

Time commitment estimate: (not including tool training)

Initial – 20% - 25%

Ongoing – 10% - 15%

Please use the survey to commit, or contact us.

How Can You Help?

- Strategy Assessment – July
- Preliminary Planning – August
- Form Team - September
- Detailed Planning – October – November

Your assistance is needed early – and continuing through the process

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Strategy Assessment – July

    Workshop to ensure alignment

Preliminary Planning – August

    Workshops

    Business case

    business plan

Team Formation – September

Detailed Planning – October – November

Executive Sponsor

- Critical success factor
  - Peggy Feldmann has volunteered
    - VEAP Director
    - Chief Applications Officer

- Feedback?

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Progress so far today.

Next Steps

- Summit Survey – right now!
- Tool Vendor Selection – June
- Strategy Assessment – July
- Preliminary Planning – August
- Form Team - September
- Detailed Planning – October – November

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Strategy Assessment – July

     Workshop to ensure alignment

Preliminary Planning – August

     Workshops

     Business case

     business plan

Team Formation – September

Detailed Planning – October – November

Parking Lot

- Deferred Issues From Today

To contact us:

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